RESEARCH

League of Oregon Cities

Water Rates Survey Report

FEBRUARY 2020

2020 Water Rates Survey Report

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A study of city water systems by League of Oregon Cities provided insight and additional data on the state of city drinking water, wastewater and stormwater. The study provided valuable information concerning water rates, as well as billing frequency and methods. The survey also asked questions to better clarify some the extent and condition of infrastructure associated with the provisions of drinking water and wastewater treatment and distribution. The results show clear differences based on region and city population. Note that drinking water, wastewater and stormwater rates differ significantly as a result of a multitude of factors and cost drivers. For example, water quality standards associated with wastewater permits (i.e. National Pollutant Discharge Elimination System Permits) vary based on specific waterbodies, and as a result, the costs associated with wastewater treatment can vary significantly. In utilizing this data, cities should be cognizant that there are often a multitude of factors that may contribute to costs beyond city size and region.

Data from this survey can also be viewed and exported on the LOC's online data portal, data.orcities.org.

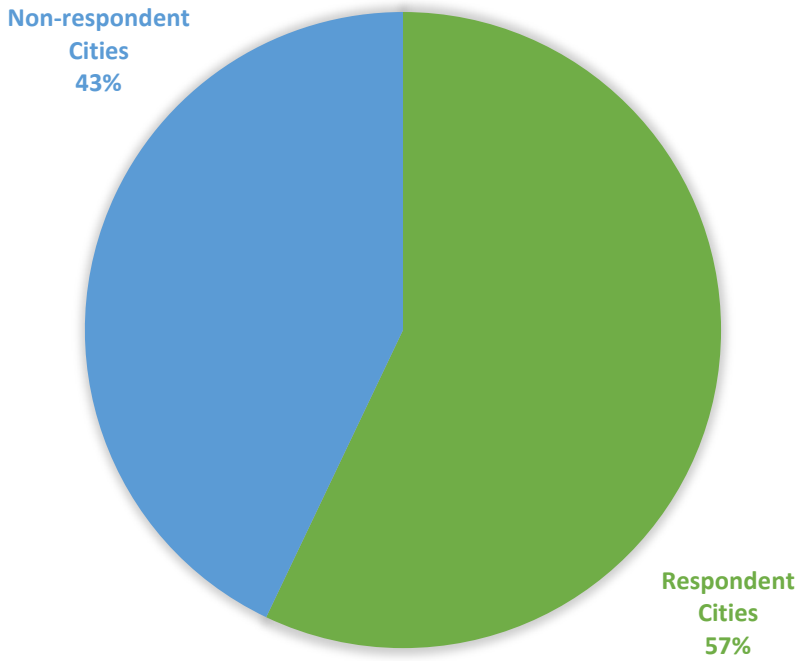
Introduction

For the last 20 years, the LOC has gathered information to better understand city drinking water and wastewater city rates. The ability to gather this information has proven to be a useful tool that allows cities to better understand trends in drinking water, wastewater and stormwater rates, and to understand how water rates might be impacted based on region, population or economic demographics. In the past, this survey was conducted in partnership with the University of Oregon as well as Oregon State University before that. However, the last two iterations of this survey have been accomplished solely by LOC.

Survey Methods

This survey was conducted from September 30 to October 25, 2019, and responses were received from 105 of Oregon's 241 cities. These responding cities represent 1,643,720 residents, or 57% of the population residing in cities. The LOC created the survey with Qualtrics and distributed it to city managers, city recorders, and other individuals with positions equal to a city's chief executive officer. These individuals often relied on support from relevant city staff or forwarded the survey to be completed by city staff.

Population		
	#	%
Quintile		
1st Quintile	17	16.2%
2nd Quintile	19	18.1%
3rd Quintile	25	23.8%
4th Quintile	23	21.9%
5th Quintile	21	20.0%
TOTAL	105	
Region		
N. Coast	7	6.7%
Metro	12	11.4%
N. Willamette	22	21.0%
S. Willamette	7	6.7%
C. Coast	5	4.8%
S. Coast	3	2.9%
S. Oregon	12	11.4%
Gorge	5	4.8%
C. Oregon	3	2.9%
SC Oregon	4	3.8%
NE Oregon	16	15.2%
E. Oregon	9	8.6%
TOTAL	105	



Cities are divided into population quintiles or groups of cities representing roughly one-fifth of the 241 total cities. This is done to provide more accurate comparison of differences among city populations. If LOC randomly selected cities from each quintile, we would expect 20% to come from each of the five quintiles. Among respondent cities, there was overrepresentation in the South-Central and Northeastern Oregon regions. Further, the survey had an underrepresentation of cities in several regions, particularly Coast regions, Gorge and Central Oregon. Cities in the 3rd population quintile (between 1,250-3,000) were overrepresented, and cities with a population less than 450 were underrepresented in amongst respondents. In the above table, cells marked with green indicate an overrepresentation and those in red denote underrepresentation.

Please see Appendix C for a map of LOC's Small Cities Regions.

General Results

Billing, Late Fees, Penalties, and Collections

On a monthly basis, 93% of the cities in Oregon issue water bills to their residents and customers. This is relatively consistent across regions and populations. Further, exactly one-half of the city respondents allow for paperless billing. This is more common in cities with a population greater than 3,000 as well as in the Metro and Valley regions.

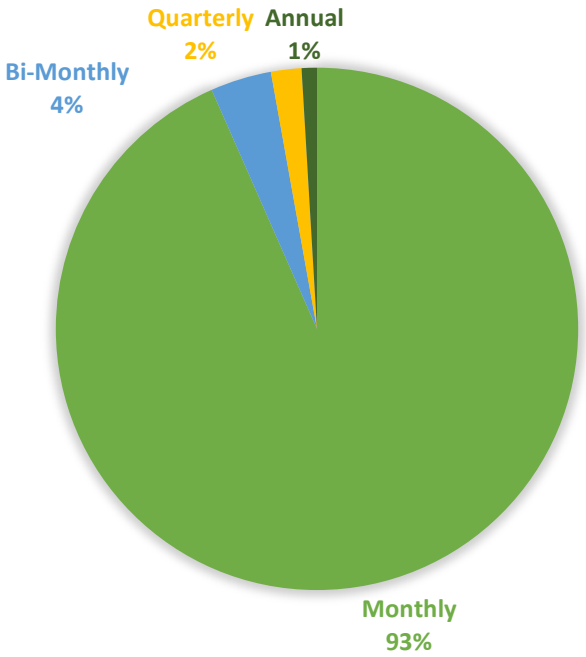


Figure 1: How often are water bills issued?

Late fees and interest rates vary. However, these average 10.2% of total bill (for late fees) and 2.9% for interest. Southern Oregon has the highest average late fee rate (15.9%) and the Gorge has the highest interest rate (9.0%). On average, late fees are assessed 19.8 days after due date. Interestingly, late fee assessment does not follow any patterns by region or size of city. Some population quintiles are on average more forgiving than others, and this is also true of regions. In short, there is no consistent trend in how late fees are charged and when these fees are issued.

Consistently across populations, water shut-off occurs after a little more than a month. The average days after due date before water service shut-off is 40 days. Most population quintiles provide between 30-40 days until shutoff for cities with a population less than 450, allowing for slightly more leeway (55.4 days).

How many days after due date before you disconnect water service?	
Quintile	
1st Quintile	55.4
2nd Quintile	33.9
3rd Quintile	35.6
4th Quintile	39.8
5th Quintile	38.5
TOTAL	40.2
Region	
N. Coast	39.3
Metro	43.5
N. Willamette	29.5
S. Willamette	43.3
C. Coast	48.7
S. Coast	18.7
S. Oregon	24.9
Gorge	37.0
C. Oregon	45.0
SC Oregon	60.0
NE Oregon	46.9
E. Oregon	60.7
TOTAL	40.2

Table 1: Disconnection Limit

What dollar amount or number of days late triggers collections? - Dollar Amount	
Quintile	
1st Quintile	$ 500.00
2nd Quintile	$ 92.50
3rd Quintile	$ 91.83
4th Quintile	$ 30.33
5th Quintile	$ 26.67
TOTAL	$ 107.93
Region	
N. Coast	$ 50.00
Metro	$ 28.33
N. Willamette	$ 100.26
S. Willamette	$ 22.50
C. Coast	NA
S. Coast	$ 21.00
S. Oregon	NA
Gorge	$ 50.00
C. Oregon	$ 25.00
SC Oregon	NA
NE Oregon	$ 71.25
E. Oregon	$ 500.00
TOTAL	$ 107.93

Table 2: Collection Limit (Dollars)

What dollar amount or number of days late triggers collections? – Days	
Quintile	
1st Quintile	97.5
2nd Quintile	71.7
3rd Quintile	62.9
4th Quintile	79.3
5th Quintile	75.4
TOTAL	74.0
Region	
N. Coast	60.0
Metro	62.5
N. Willamette	57.1
S. Willamette	90.0
C. Coast	180.0
S. Coast	75.0
S. Oregon	71.0
Gorge	37.5
C. Oregon	60.0
SC Oregon	60.0
NE Oregon	84.4
E. Oregon	110.0
TOTAL	74.0

Table 3: Collection Limit (Days)

Tables 1-3 show the breakdown of not only when water services are disconnected but also what triggers bills being sent to collection. Again, here we see much more leeway from cities with less than 450 residents. Cities average about $120 in back payments, or 74 days before bills are sent to collections. Interestingly, cities with a population greater than 3,000 are quite strict on what dollar amount triggers collections. Only one city indicated that it will send any amount delinquent to collections. In contrast, several small cities do not send bills to collections until they exceed $500.

Waivers, Discounts and Adjustments

Thirty-nine percent of cities provide waivers, discounts or reductions to certain segments or their customer base. This is most commonly based on low-income status of residents. Such accommodations are most likely to occur in cities over 1,250 population and in the North Coast, Metro, and South Willamette regions.

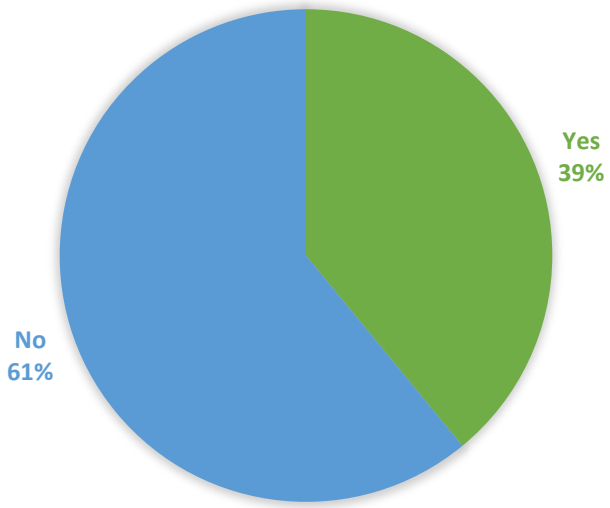


Figure 2: Does the city provide waivers, discounts or reductions to certain utility customers?

Accommodations are often made for detected leaks that could significantly increase water bills. On average, cities will go as far back as 82 days to provide a billing adjustment. As most cities charge monthly, this average implies that cities will adjust as far back as three billing cycles. Data collected on this shows a clear pattern based on population. Table 4 shows that while smaller cities are more lenient on delinquent payments, there is far less accommodation for miscalculation of bills due to detected leaks. Cities with a population less than 450 average 30 days readjustment, whereas cities with a population greater than 10,000 average 129 days or about four billing cycles.

If a leak is detected, how far back does the city make adjustments to the water bill? - Days	
Quintile	
1st Quintile	30.0
2nd Quintile	77.9
3rd Quintile	61.1
4th Quintile	84.0
5th Quintile	129.3
TOTAL	81.7
Region	
N. Coast	60.0
Metro	147.1
N. Willamette	101.4
S. Willamette	101.9
C. Coast	37.5
S. Coast	70.0
S. Oregon	63.8
Gorge	45.0
C. Oregon	15.0
SC Oregon	30.0
NE Oregon	36.4
E. Oregon	136.3
TOTAL	81.7

Table 2: Bill Adjustments for Water leaks - Days

Many of the cities that allow for adjustment due to leaks note that written requests must be made by the customer before the adjustment will me implemented.

Asset Management Systems

Cities were asked if they maintain asset management systems for drinking water, wastewater, and stormwater services, respectively. According to the Environmental Protection Agency, asset management is "a process water and wastewater utilities can use to make sure that planned maintenance can be conducted and capital assets (pumps, motors, pipes, etc.) can be repaired, replaced, or upgraded on time and that there is enough money to pay for it." Figure 3 shows that 38 cities (or 36% of respondents) utilize asset management for drinking water, 35 cities (33% of respondents) for wastewater, and 22 cities (21% of respondents) for stormwater. These systems are consistently more likely to be utilized by cities with a population greater than 3,000 and in Metro and Valley regions. This suggests that larger systems, with greater revenue and staffing capacity, are able to engage in asset management. Though, asset management for drinking water and wastewater is also more frequently utilized in the South Coast and Northeastern Oregon regions as well.

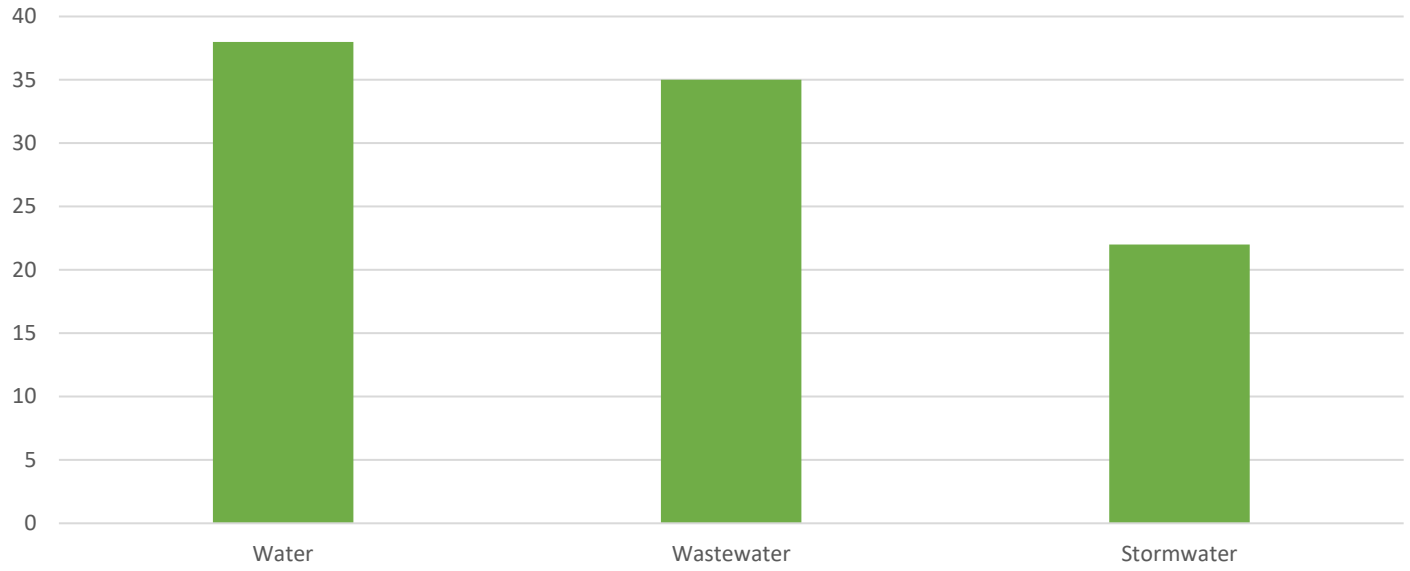


Figure 3: Asset Management Systems by Water Service Type

Rate Studies and Methodology

Cities were asked to indicate the last time they updated their rate and calculation methodology through a rate study. Rate studies are often conducted to help municipalities develop financial plans and rates that will generate sufficient revenue to fund operating and capital needs, and to help ensure that the rates charged to adequately fund the system are assessed equitably among ratepayers. The survey showed the mean last year for rate studies was 2014 (for water) and 2013 (wastewater and stormwater). Methodology updates were only slightly older; averaging 2013 (for water), 2012 (for wastewater), and 2011 (stormwater). Several cities had not conducted studies on these services for more than 20 years.

Other Billing and Rate Details

Eighty percent of cities do not require water utilities to be registered in a property owner's name. Most cities handle billing for vacant properties by closing the account with no additional charge. However, 12 cities do charge a vacancy rate. Others will bill a base rate or flat fee to the property owner. The survey also solicited data on any additional fees that may be added to utility bills. Additional fees indicated include backflow testing (11%), new account fees (38%), shutoff

fees (54%), and fees for tampering with water or wastewater lines (24%). Other additional fees are more unique to the cities. As indicated below, some cities utilize drinking water and wastewater bills to asses non-related fees for services such as public safety or ambulance fees. While the fee revenue is not generated for the purpose of supporting drinking water, wastewater or stormwater services, the practice of including other fees on water-related bills can serve as a more efficient means for billing and collecting other revenues. Responses included:

- Ambulance Fee
- Capital Improvements
- Debt Service
- Dirt Fill/Blocked Access
- Door Hanger Fee
- Excess Water Usage
- Fire Flow Charges
- Franchise Fees
- Garbage/Sanitation
- Streets and Infrastructure
- Streetlights
- Irrigation
- Late Fees
- Public Safety Fees
- Reconnection Fees
- System Development Charges

Most cities do not charge for stormwater services on their utility bill. Those cities that do are most likely to have a population greater than 3,000 and be located in the Metro and Willamette regions. This reflects federal requirements for certain municipalities (based on population) to obtain a Municipal Separate Storm Sewer System (MS4) permit. Phase 1 permits are required by the Environmental Protection Agency for designated areas with populations greater than 100,000 and Phase II permits are required for populations under 100,000 but that are located within a Census Bureau designated "urbanized area."

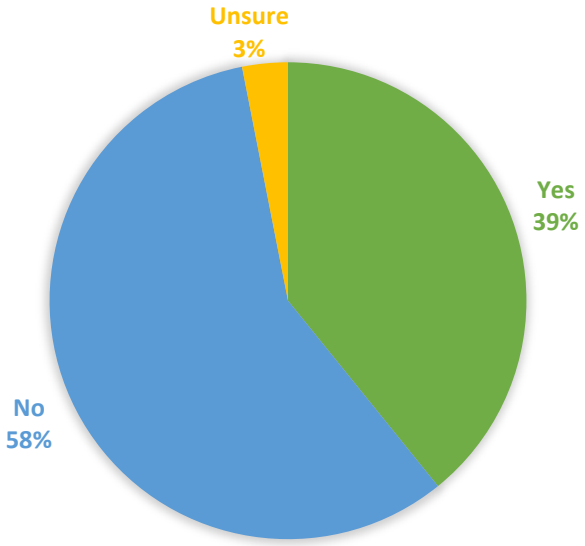


Figure 4: Is Stormwater Included in the Utility Bill?

Drinking Water Rates and Methods

Sixty-one percent of cities charge for drinking water services. This is also most common in cities with a population greater than 3,000 and for the Metro and Willamette regions. 2018 was the last year that water rates were changed. This indicates that rate changes occur often. Nearly all regions and populations had made such adjustments either in 2018 or this year. Only the 3rd quintile (1,250-3,000 population), and the North Coast region, differed with the last average adjustment in 2017. Among the 54 cities that responded to this question, 100% of those cities noted that the water rate adjustment was an increase. The amount of increase varied dramatically. On average, the increase was 7.7%.

While many cities noted increases of less than 3%, many reported much higher increases. Eight cities noted double digit increases. The LOC asked cities to describe the reason for these increases. The majority of increases under 3% are most commonly due to CPI and inflation adjustments. Double digit increases are most commonly due to increased treatment and labor costs. Five cities (Hermiston, Portland, Albany, Sandy, and Sherwood) listed state and federal mandates as reasons for rate increases.

The Rate % Increase for Water Services	
Quintile	
1st Quintile	9.3%
2nd Quintile	3.4%
3rd Quintile	12.6%
4th Quintile	5.3%
5th Quintile	6.8%
TOTAL	7.7%
Region	
N. Coast	3.2%
Metro	3.3%
N. Willamette	11.4%
S. Willamette	7.7%
C. Coast	1.3%
S. Coast	NA
S. Oregon	11.3%
Gorge	3.1%
C. Oregon	1.0%
SC Oregon	2.3%
NE Oregon	10.6%
E. Oregon	3.0%
TOTAL	7.7%

Table 3: Rate Service Increases by Population and Region

Among the cities that responded, most utilize a drinking water rate structure that includes a base or flat rate (based on a certain quantity threshold of water use), with an additional rate based on additional water use beyond that threshold amount. This rate structure is commonly referred to as an inclining block rate structure. The LOC provided a hypothetical water service scenario in which a residential customer was billed for 5,000 gallons (6.684 CCFs) with a ¾" meter size. Cities were asked to provide calculated amount that would be charged based on their methods and rate. As water rates can vary based on quantity of water consumed and the meter size, this exercise was intended to provide for a more consistent mechanism to compare water rates. Table 6 shows the average across all cities at $41.23.

For water services, what dollar amount would you bill them?		
Quintile		
1st Quintile	$	43.57
2nd Quintile	$	57.96
3rd Quintile	$	37.94
4th Quintile	$	44.39
5th Quintile	$	34.14
TOTAL	$	41.23
Region		
N. Coast	$	40.21
Metro	$	41.57

N. Willamette	$	45.17
S. Willamette	$	44.99
C. Coast	$	49.17
S. Coast	NA	
S. Oregon	$	45.75
Gorge	$	40.25
C. Oregon	$	27.72
SC Oregon	$	20.34
NE Oregon	$	32.67
E. Oregon	$	39.25
TOTAL	$	41.23

Table 4: For water services, what dollar amount would you bill them, including the base rate?

Wastewater Rates and Methods

Seventy-nine percent of cities charge for wastewater services. This is more common in cities with a population greater than 1,25,0 as well as those in the South Willamette, South-Central Oregon and Northeastern Oregon Regions. It can be assumed that populations residing within cities that do not provide public/municipal wastewater service, either depend on residential septic systems or are served by another municipality, such as a county or special service district.

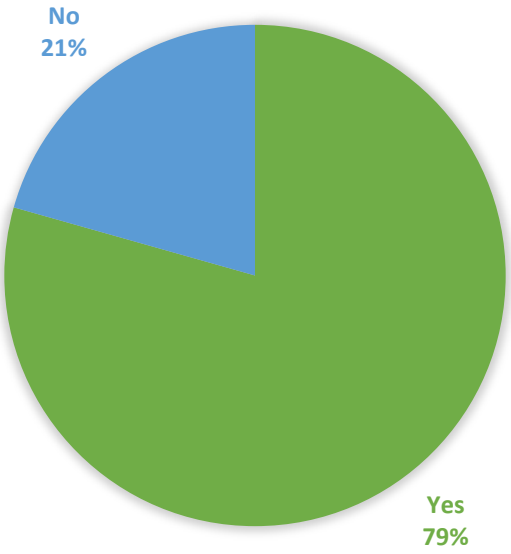


Figure 5: Does your City Charge for Wastewater Services?

2017 was the average last year that wastewater rates were changed. Nearly all regions and populations had adjusted wastewater rates in the last five years. This indicates that drinking water rates may change far more frequently than wastewater rates. All responding cities noted that this adjustment was an increase. On average, the increase was 8.4%.

While many cities noted increases of less than 3%, many reported much higher increases. Eleven cities noted double digit increases. LOC asked cities to describe the reason for these increases. The majority of increases under 3% are most commonly due to CPI and inflation adjustments. Double digit increases are most commonly due to increased treatment and labor costs. Eight cities listed state and federal mandates as reasons for rate increases.

The Rate % Increase for Wastewater Services	
Quintile	
1st Quintile	9.3%
2nd Quintile	11.3%
3rd Quintile	7.4%
4th Quintile	4.9%
5th Quintile	11.7%
TOTAL	8.4%
Region	
N. Coast	2.8%
Metro	12.8%
N. Willamette	6.5%
S. Willamette	4.1%
C. Coast	4.6%
S. Coast	2.6%
S. Oregon	12.5%
Gorge	3.1%
C. Oregon	2.0%
SC Oregon	2.3%
NE Oregon	10.9%
E. Oregon	25.7%
TOTAL	8.4%

Among the cities that responded, most charge for wastewater based on a base or flat rate, with an additional rate for amount consumed afterward. The LOC provided a hypothetical water service scenario in which a residential customer was billed for 5,000 gallons (6.684 CCFs) with a 3/4" meter size, the same scenario as requested for drinking water. Table 7 shows the average across all cities at $51.14.

For wastewater services, what dollar amount would you bill them?	
Quintile	
1st Quintile	$41.87
2nd Quintile	$51.07
3rd Quintile	$48.62
4th Quintile	$56.89
5th Quintile	$49.99
TOTAL	$51.14
Region	
N. Coast	$51.18
Metro	$51.98
N. Willamette	$56.41
S. Willamette	$46.41
C. Coast	$65.91
S. Coast	$62.93
S. Oregon	$63.48
Gorge	$60.72
C. Oregon	$37.88
SC Oregon	$35.92
NE Oregon	$40.32
E. Oregon	$44.50
TOTAL	$51.14

Table 5: For wastewater services, what dollar amount would you bill them, including the base rate?

Stormwater Rates and Methods

Forty percent of cities charge for stormwater services. These services are present almost exclusively in cities with a population greater than 3,000, and those in the Metro, Willamette Valley and North Coast regions. Again, this likely reflects those cities that are required by the Environmental Protection Agency to have a Municipal Separate Storm Sewer System permit (commonly known as a MS4 permit).

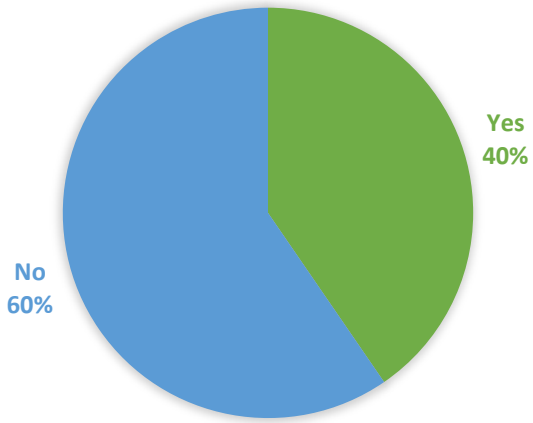


Figure 6: Does your City Charge for Stormwater Services?

Again, 2017 was the average last year that stormwater rates were changed. Nearly all regions and populations had made such adjustments in the last five years, although several cities had maintained rates since the early 2000s. All respondent cities noted that this adjustment was an increase. On average, the increase was 13.6%. This change was most significant in cities in the North Willamette region, which saw an average increase of 36.4%. The highest rates of increase come from the 3rd quintile (cities between 1,250 and 3,000 population).

The Rate % Increase for Wastewater Services	
Quintile	
1st Quintile	NA
2nd Quintile	2.0%
3rd Quintile	62.4%
4th Quintile	12.9%
5th Quintile	6.2%
TOTAL	13.6%
Region	
N. Coast	3.0%
Metro	6.4%
N. Willamette	36.4%
S. Willamette	4.2%
C. Coast	1.7%
S. Coast	NA
S. Oregon	3.4%
Gorge	3.1%
C. Oregon	4.0%
SC Oregon	NA
NE Oregon	14.2%
E. Oregon	NA
TOTAL	13.6%

Most respondent cities charge for stormwater as a separate utility fee on a dollars per month basis. Table 8 shows the average across all cities at $8.20.

For Stormwater services, what dollar amount would you bill them?	
Quintile	
1st Quintile	NA
2nd Quintile	NA
3rd Quintile	$6.83
4th Quintile	$4.80
5th Quintile	$11.03
TOTAL	$8.20
Region	
N. Coast	$9.78
Metro	$12.95
N. Willamette	$6.26
S. Willamette	$4.04
C. Coast	$6.83
S. Coast	NA
S. Oregon	$4.66
Gorge	$9.54
C. Oregon	$8.18
SC Oregon	NA
NE Oregon	$8.00
E. Oregon	NA
TOTAL	$8.20

Table 6: For stormwater services, what dollar amount would you bill them on a per month basis?

Service Population, Consumption, and Infrastructure

Cities provide water services to residents, but may also provide service to individuals outside city limits. In 2018, the average service population for respondent cities was proportional to the size of each city. While this is no shock, the more interesting insight is the proportion of customers, receiving drinking water services, outside of city limits. On average, the number of serviced residential accounts with drinking water outside city limits was 41% the number of accounts inside the city proper. This means that large swaths of non-city residents benefit from drinking water services provided by Oregon cities. More interesting, the proportion of accounts outside of city limits increases as city population increases. This may be a reflection of urbanization and population growth occurring within urban growth boundaries. This same trend is seen in wastewater, where on average customers outside city limits represent 30% the number within the city.

In terms of gallons, city residents (and outside city limits customers) consumed an average of 84 million gallons of drinking water in 2018. This consumption increases with population but also varies by region. Table 9 shows that several regions are more likely to consume more water including: North Coast, Metro, and Northeastern Oregon. Water consumption can be impacted by a number of factors, including water conservation efforts and plans, or aging infrastructure that may be subject to increased leakage.

What is the annual average water consumption for residential customers (in gallons)?	
Quintile	
1st Quintile	6,566,487
2nd Quintile	4,623,667
3rd Quintile	60,040,707
4th Quintile	35,474,776
5th Quintile	192,932,393
TOTAL	83,790,363
Region	
N. Coast	174,284,481
Metro	332,401,612
N. Willamette	10,818,236
S. Willamette	40,686
C. Coast	62,907,510
S. Coast	NA
S. Oregon	31,163
Gorge	48,000
C. Oregon	94,588
SC Oregon	1,300,000
NE Oregon	88,014,416
E. Oregon	2,903,000
TOTAL	83,790,363

Table 7:Average Annual Residential Consumption (Gallons)

This high demand and high consumption translate into increased need for water infrastructure. The table below shows the average number of pumps and lift stations, zones and water levels, and the total miles of water pipe (not including laterals). Comparing regions is far less useful in this case as regional geographic differences influence city water infrastructure. However, there is an obvious trend in the water infrastructure by population. Each column in Table 10 shows that as a city grows, even with regional variation, infrastructure expands and becomes more complex. The overwhelming majority of cities had only a single water treatment facility with the exception of Brownsville, Salem, and Hillsboro, which had two.

City Infrastructure Averages				
	Drinking Water Pumps and Lift Stations	*Zones and Levels*	*Total Miles of Water Pipes*	*Total Miles of Sewer Lines*
Quintile				
1st Quintile	2.0	0.5	6.0	2.0
2nd Quintile	7.3	2.7	12.0	11.5
3rd Quintile	7.0	3.7	28.5	13.0
4th Quintile	3.8	2.0	39.7	58.2
5th Quintile	9.5	5.4	197.2	159.3
TOTAL	5.9	3.3	87.9	79.5
Region				
N. Coast	3.0	6.0	48.0	36.0
Metro	5.9	4.0	117.0	80.2
N. Willamette	9.0	4.2	119.0	120.0
S. Willamette	4.7	1.9	60.5	22.0
C. Coast	7.0	3.7	37.8	34.2
S. Coast	NA	NA	NA	NA
S. Oregon	6.0	2.3	86.0	147.5
Gorge	5.0	1.0	3.0	3.0
C. Oregon	15.0	3.0	177.0	80.0
SC Oregon	NA	NA	NA	NA
NE Oregon	2.9	1.6	84.4	52.0
E. Oregon	4.5	5.0	20.0	20.0
TOTAL	5.9	3.3	87.9	79.5

Table 8: Averages for City Water Infrastructure

On average, the last major update for city drinking water systems was in 2009. Most cities were within three years of this average. Despite recent updates, additional expansion may be needed for many Oregon cities. Respondent cities noted daily production would exceed the design of their water systems by 2038. It should be noted that this average varies significantly by population quintile. Cities under 1,250 were not likely to exceed design capacity until 2043. However, cities over 10,000 population would exceed production on average by 2036, sixteen years from present. Several cities had noted already reaching capacity. Central Oregon region cities would exceed system design capacity by 2022.

Wastewater systems, on average, are due to reach design capacity by 2039. Again, this is most likely to occur sooner in cities over 10,000. North Coast and Metro regions will exceed capacity the soonest (2022 and 2023, respectively).

Water Conservation, Management, and Reclamation

Seventy-one percent of cities have a water management and conservation plan (WMCP). These plans can be adopted voluntarily but are often a required condition associated with state-issued water right permits. Cities with a WMCP tend to have a population greater than 3,000 and be located in the Metro, Valley and Northeastern Oregon regions. Even more cities (87%) measure their water loss. This is also more likely to occur in the above stated quintiles and regions.

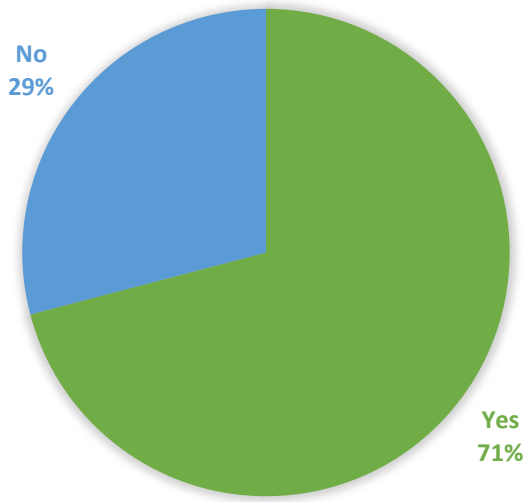


Figure 7: Does your city have an approved water conservation and management plan?

Forty-four percent of cities utilize or provide reclaimed water for irrigation on public or private property. This is most likely to occur in cities with a population greater than 10,000, as well as in Central, South-Central, and Northeastern Oregon. On average, 44.6 of reclaimed water is reused and applied to these properties. Forty percent of cities with such a program noted a majority of their water was reclaimed. Common types of property where the water was reused include farmland and golf courses.

Fewer cities apply biosolids to public or private property. Thirty-one percent have such a program for biosolids, and these cities are more likely over 10,000 population as well as in Metro region. Cities on average landfill 49% of biosolids.

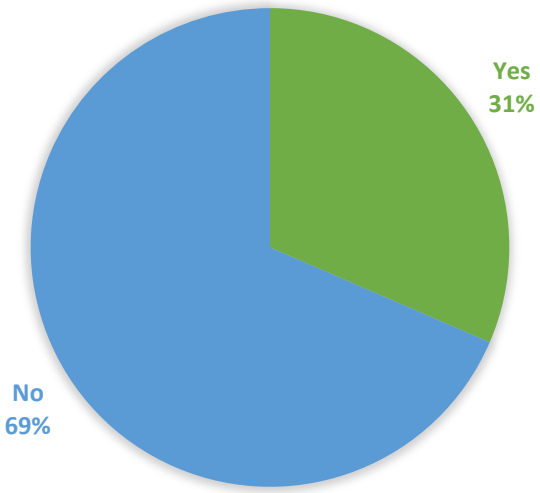


Figure 8: Does your city apply biosolids to public/ private property?

Appendix A: Invitation to Participate

The League needs your help – please complete this survey by Friday, October 25th.

The League of Oregon Cities appreciates your participation in the 2019 Water & Wastewater Rate Survey. We have been gathering this information every 2-5 years for over 20 years now. Our ability to gather this information has proven to be a useful tool that allows cities to better understand trends in water, wastewater and stormwater rates; and to understand how water rates might be impacted based on region, population or economic demographics

.

NOTE: Please submit all answers using the online form. Please use the attached PDF only for information and guidance.

Survey Link Below:

http://orcities.co1.qualtrics.com/jfe/form/SV_cNHkJVBHIMuWd0h

Please don't hesitate to contact me if you have any questions regarding the survey at research@orcities.org or 503-588-6550.

Thank you in advance for taking the time to fill out this important survey.

League of Oregon Cities

Tracy Rutten, *Intergovernmental Relations Associate*
503-588-6550 direct: 503-540-6576
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1201 Court St. NE, Suite 200, Salem, OR 97301-4194
www.orcities.org

Appendix B: Survey Instrument

Water Rates Survey 2019

Q1 **Water Rates Survey 2019**

***Note**: Unless otherwise stated, the following questions pertain to residential (non-commercial) water, wastewater, and stormwater rates.*

Q2 Respondent Information:

- City Name: (1) _____
- Your Name: (2) _____
- Your Job Title: (3) _____
- Your Email Address: (4) _____
- Your Phone Number: (5) _____

Q3 **UTILITY BILLING**

This section asks questions about city billing including rates and methods. All questions relate to residential utility billing.

Q4 How often are bills issued?

- Monthly (1)
- Bi-Monthly (2)
- Quarterly (3)
- Other (Please Specify) (4) _____

Q5 What methods of payment are accepted? (Check all that apply)

- ☐ Cash (1)
- ☐ Check (2)
- ☐ Credit/Debit (3)
- ☐ Money Order (4)
- ☐ Direct Deposit (5)
- ☐ e-check (6)

Q6 Do you provide paperless billing?

- ❍ Yes (1)
- ❍ No (2)

Q7 What methods of enforcement are used for late or nonpayments? (Check all that Apply)

- ☐ Late Fee (1)
- ☐ Late Fee and Interest (2)
- ☐ Disconnect Water Service (3)
- ☐ Collections (4)
- ☐ Lien on Property (5)
- ☐ Other (Please Specify) (6) _____

Display This Question:
If What methods of enforcement are used for late or nonpayments? (Check all that Apply) = Late Fee
Or What methods of enforcement are used for late or nonpayments? (Check all that Apply) = Late Fee and Interest

Q8 What is the late fee rate?

_____

Display This Question:
If What methods of enforcement are used for late or nonpayments? (Check all that Apply) = Late Fee and Interest

Q9 What is the interest rate?

_____

Display This Question:
If What methods of enforcement are used for late or nonpayments? (Check all that Apply) = Late Fee

Q10 How many days past due date are allowed before the late fee is assessed?

_____

Display This Question:
If What methods of enforcement are used for late or nonpayments? (Check all that Apply) = Late Fee and Interest

Q11 What is the penalties amount and interest rate?

- Penalties Amount (1) _____
- Interest Rate (2) _____

Display This Question:
If What methods of enforcement are used for late or nonpayments? (Check all that Apply) = Disconnect Water Service

Q12 How many days after due date before you disconnect water service?

_____

Display This Question:
If What methods of enforcement are used for late or nonpayments? (Check all that Apply) = Collections

Q13 What dollar amount or number of days late triggers collections?

- Dollar Amount (1) _____
- Days (2) _____

Q14 Does the city provide waivers, discounts or reductions to certain utility customers?

- ❍ Yes (1)
- ❍ No (2)

Display This Question:
If Does the city provide waivers, discounts or reductions to certain utility customers? = Yes

Q15 Please describe these waivers, discounts and reductions:

_____
_____
_____
_____
_____

Q16 Does your city provide credit or make any billing adjustments for leaks or billing errors?

- ❍ Yes, water leaks (1)
- ❍ Yes, billing errors (2)
- ❍ Yes, both (3)
- ❍ No (4)

Display This Question:
If Does your city provide credit or make any billing adjustments for leaks or billing errors? = Yes, water leaks
Or Does your city provide credit or make any billing adjustments for leaks or billing errors? = Yes, both

Q17 For what services are adjustments made for customer water leaks

- ☐ Water (1)
- ☐ Wastewater (2)

Q18 If a leak is detected, how far back does the city make adjustments to the water bill?

- ❍ Days (1) _____
- ❍ Other Comments (2) _____

Display This Question:
If For what services are adjustments made for customer water leaks = Wastewater

Q19 Please describe what you do for wastewater adjustments.

_____
_____
_____
_____
_____

Q20 Please email copies of your city **Water/Wastewater Shutoff Policy** and the city **Water Rate Schedule** to research@orcities.org.

Q21 **RATES & CHARGES**

This section asks questions about debt services, asset management, and types of rates charged for water, wastewater, and stormwater.

Q22 What percentage of rate revenue is obligated to debt services for the following systems?

	Rate Revenue	Not Applicable
	% (1)	N/A (1)

Water (1)		☐
Wastewater (2)		☐
Stormwater (3)		☐

Q23 Does your city maintain an asset management system for the following services?

	Yes (1)	No (2)	N/A (3)
Water (1)	❍	❍	❍
Wastewater (2)	❍	❍	❍
Stormwater (3)	❍	❍	❍

Q24 What was the last year you did a Rate Study for the following services?

- ❍ Water (1) _____
- ❍ Wastewater (2) _____
- ❍ Stormwater (3) _____

Q25 What was the last year you did a Methodology Update for the following services?

- ❍ Water (1) _____
- ❍ Wastewater (2) _____
- ❍ Stormwater (3) _____

Q26 Does your city require accounts to be in the name of the property owner?

- ❍ Yes (1)
- ❍ No (2)

Q27 How does your city handle billing for vacant properties?

- ❍ Close accounts with no charges until opened by next occupant (1)
- ❍ Our city does not handle billing for vacant properties (5)
- ❍ Charge a vacant rate upon request of the owner. (Please Explain) (2)

_____

- ❍ Other (Please Specify) (4) _____

Q28 What other account fees or charges are included on the utility bill? (Check all that apply)

- ☐ Backflow (1)
- ☐ New Account (2)
- ☐ Shutoff (3)
- ☐ Tampering (4)
- ☐ None (5)
- ☐ Other (Please Specify) (6) _____

Q29 Is stormwater included in the utility bill?

- ❍ Yes (1)
- ❍ No (2)
- ❍ Unsure (3)

Q30 What general government fees are included on the utility bill? (Check all that apply)

- ☐ Streets & Streetlights (1)
- ☐ Parks & Recreation (2)
- ☐ Police (3)
- ☐ Fire (7)
- ☐ Library (4)
- ☐ Surface Water Management (8)
- ☐ Other (Please Specify) (6)

Q31 Does city ordinance have an automatic CPI/Income adjustment for the following services?

	Yes (1)	No (2)	N/A (3)
Water (4)	❍	❍	❍
Wastewater (5)	❍	❍	❍
Stormwater (6)	❍	❍	❍

Q32 Does your city charge for drinking water service?

- ❍ Yes (1)
- ❍ No (2)

Skip To: End of Block If Does your city charge for drinking water service? = No

Q33 What was the last effective date of your city's most recent rate change for water services? (Please respond with the year only)

_____

Q34 Overall, did the rate increase or decrease at the most recent rate change? Please also include the percent (%) change.

- Increase (% Increase) (1) _____
- Decrease (% Decrease) (2) _____

Q35 Why did the city change water rates? (Check all that apply)

- ☐ State/ Federal Mandate (1)
- ☐ Inflation/ CPI (2)
- ☐ Treatment Costs (3)
- ☐ Labor Costs (4)
- ☐ Capital Improvement (5)
- ☐ Unknown (6)
- ☐ Other (Please Specify) (7) _____

Q36 What is the rate structure for your city's water service?

- Flat Rate (Monthly Lump Sum) (1)
- Uniform Rate (Monthly Rate based on Number of Gallons Used) (5)
- Inclining Block Rate (2)
- Flat + Inclining Rate (6)
- Declining Block Rate (3)
- Flat + Declining Rate (7)
- Other (Please Specify) (4) _____

Q37 For water services, if you were to bill a residential customer for 5,000 gallons (6.684 CCFs) with a 3/4" meter size, what dollar amount would you bill them, including the base rate?

_____

Q38 Does your city charge for wastewater service?

- ❍ Yes (1)
- ❍ No (2)

Skip To: End of Block If Does your city charge for wastewater service? = No

Q39 What was the last effective date of your city's most recent rate change for wastewater services? (Please respond with the year only)

_____

Q40 Overall, did the rate increase or decrease at the most recent rate change? Please include percent (%) change.

- ❍ Increase (% Increase) (1) _____
- ❍ Decrease (% Decrease) (2) _____

Q41 Why did the city change wastewater rates? (Check all that apply)

- ☐ State/ Federal Mandate (1)
- ☐ Inflation/ CPI (2)
- ☐ Treatment Costs (3)
- ☐ Labor Costs (4)
- ☐ Capital Improvement (5)
- ☐ Unknown (6)
- ☐ Other (Please Specify) (7) _____

Q42 What is the rate structure for your city's wastewater service?

- ❍ Flat Rate (1)
- ❍ Winter average water consumption used in summer months (2)
- ❍ Winter average water consumption used all year (3)
- ❍ Other (Please Specify) (4) _____

Q43 For wastewater services, if you were to bill a residential customer for 5,000 gallons (6.684 CCFs) with a 3/4" meter size, what dollar amount would you bill them, including the base rate?

_____

Q44 Does your city charge for stormwater service?

- ❍ Yes (1)
- ❍ No (2)

Skip To: End of Block If Does your city charge for stormwater service? = No

Q45 What was the last effective date of your city's most recent rate change for stormwater services? (Please respond with the year only)

_____

Q46 Overall, did the rate increase or decrease at the most recent rate change? Please include the percent (%) change.

- ❍ Increase (% Increase) (1) _____
- ❍ Decrease (% Decrease) (2) _____

Q47 Is your city subject to an MS4 Phase I or Phase II (DEQ Issued Stormwater) Permit?

- ❍ Yes (1)
- ❍ No (2)
- ❍ Unsure (3)

Q48 Why did the city change stormwater rates? (Check all that apply)

- ☐ State/ Federal Mandate (1)
- ☐ Inflation/ CPI (2)
- ☐ Treatment Costs (3)
- ☐ Labor Costs (4)
- ☐ Capital Improvement (5)
- ☐ Unknown (6)
- ☐ Other (Please Specify) (7) _____

Q49 What is the rate structure for your city's stormwater service?

- ❍ Stormwater fees are included in wastewater rates (1)
- ❍ Stormwater fees are a separate utility fee (2)
- ❍ Stormwater fees are paid to a joint district within the county (3)
- ❍ Other (Please Specify) (5) _____

Q50 Does your city offer stormwater fee reductions or credits for onsite stormwater management?

- ❍ Yes (1)
- ❍ No (2)

Display This Question:
If Does your city offer stormwater fee reductions or credits for onsite stormwater management? = Yes

Q51 Please describe the reduction or credit (including the amount for onsite stormwater management)

_____
_____
_____
_____
_____

Q52 What does the average house pay for stormwater services (dollars per month)?

_____

Q53 **DRINKING WATER SERVICES**

This section asks questions about water services characteristics such as connections, facilities, water sources, system age and condition, conservation, water loss, and metering.

Q54 Does your city provide drinking water services?

- ❍ Yes (1)
- ❍ No (2)

Skip To: End of Block If Does your city provide drinking water services? = No

Q55 What is the service population in 2018?

	Inside City Limits (1)	Outside City Limits (2)
Service Population (Permanent Residents) (1)		
Service Population (Including Peak Seasonal) (2)		

Q56 Please list the number of connections for the following:

	Inside City Limits (1)	Outside City Limits (2)
Residential (1)		
Commercial (2)		
Other (3)		

Q57 What is the annual average water consumption for residential customers (in gallons)?

_____

Q58 Please provide the following facility and water source information:

- Total miles of water lines (all sizes), not including service laterals (1)

_____

- Total number of pumps and lift stations in your city (2)

_____

- How many levels or zones based on elevation do you have? (3)

_____

- How far away is the water source from the city (miles)? (4)

_____

Q59 Please provide the following system age and capacity information:

- Year of original system construction completion (1) _____
- Year of last major update (2) _____
- What is the capacity of your water source? (3) _____
- What is the design capacity of your water plant(s) (MGD)? (4)

_____

- What was the average daily production in 2018 (MG)? (5)

_____

- How much of your daily average production is sold (not including city use)? (6)

_____

- What was the peak flow of water treated in a 24-hour period in 2018? (7)

_____

Q60 Please list the amount of raw and treated water storage you have for the different types of applicable storage:

	Raw Water Storage (MG) (1)	Treated Water Storage (MG) (2)
Closed Tanks (1)		
Covered Urban Reservoirs (2)		
ASR Reservoir (3)		
Other (Please Specify) (4)		

Q61 In what year will your daily production exceed design capacity?

_____

Q62 Does your city have an approved water conservation and management plan?

- ❍ Yes (1)
- ❍ No (2)

Q63 Do you measure water loss?

- ❍ Yes (1)
- ❍ No (2)

Q64 What method is used to determine water loss in the system?

- ❍ IWA/AWWA water loss methodology (2)
- ❍ Comparison of productions meters and customer metered volumes (3)
- ❍ Other (Please Specify) (4) _____
- ❍ Unsure (5)

Q65 What percentage of the system does each type of meter represent?

- ❍ Radio (%) (1) _____
- ❍ Touch (%) (2) _____
- ❍ Manual Read (%) (3) _____

Q66 Do you have any additional comments on water services?

_____
_____
_____
_____
_____

Q67 **WASTEWATER SERVICES**

This section asks questions about water services characteristics such as connections, facilities, treatment, system age and condition, and city wastewater programs.

Q68 Does your city provide wastewater services?

- ❍ Yes (1)
- ❍ No (2)

Skip To: End of Block If Does your city provide wastewater services? = No

Q69 What is the service population in 2018?

	Inside City Limits (1)	Outside City Limits (2)
Service Population (Permanent Residents) (1)		
Service Population (Including Peak Seasonal) (2)		

Q70 Please list the number of connections for the following:

	Inside City Limits (1)	Outside City Limits (2)
Residential (1)		
Commercial (2)		
Other (3)		

Q71 What is the annual average wastewater base (volume) for a residential customer (x1000 gal. or 1.337 CCFs)?

_____

Q72 Please provide the following facility, lines, and treatment information:

- Total miles of sewer lines (all sizes), not including service laterals (1)

_____

- Total number of pumps and lift stations in your city (2)

_____

- Total number of treatment plants (3) _____
- What percent of city wastewater lines also serve stormwater (i.e. combined sewer)? (4)

_____

Q73 What level of wastewater treatment is provided to city wastewater (Check all that apply)?

- ☐ Primary (1)
- ☐ Secondary (2)
- ☐ Advanced Treatment/ Tertiary (3)
- ☐ Nitrogen Removal (4)
- ☐ Phosphorous Removal (5)
- ☐ Other (Please Specify) (6) _____

Q74 Please provide the following system age and capacity information:

- Year of original plant construction completion (1) _____
- Year of last major plant update (2) _____
- What is the design capacity of your treatment plant(s) in dry weather (MGD)? (3) _____
- What is the design capacity of your treatment plant(s) in peak wet weather (MGD)? (4) _____
- What is the total amount of wastewater treated in 2018 (MG)? (5) _____
- What was the peak wet weather flow in 2018 (MGD)? (6) _____
- What was the peak dry weather flow in 2018 (MGD)? (7) _____

Q75 At what percent (%) capacity is the entire wastewater system operating?

_____

Q76 In what year will the wastewater system be at maximum capacity?

_____

Q77 In what year will your daily production exceed design capacity?

_____

Q78 Does your city administer an industrial wastewater pre-treatment program?

- Yes (1)
- No (2)

Q79 Does your city apply or provide reclaimed water to public/private property?

- Yes (1)
- No (2)

Q80 What percentage (%) of total reclaimed water is reused/applied?

_____

Display This Question:
If Does your city apply or provide reclaimed water to public/private property? = Yes

Q81 Where does this reuse and application occur (i.e. city park, private golf course, industrial cooling tower, etc.)?

_____
_____
_____
_____
_____

Q82 Does your city apply biosolids to public/ private property?

- ❍ Yes (1)
- ❍ No (2)

Display This Question:
If Does your city apply biosolids to public/ private property? = Yes

Q83 Where does this biosolid application occur (i.e. city park, private golf course, etc.)?

_____
_____
_____
_____
_____

Q84 Does your city landfill biosolids?

- ❍ Yes (1)
- ❍ No (2)

Display This Question:
If Does your city landfill biosolids? = Yes

Q85 What percentage (%) of biosolids are landfilled?

_____

Q86 Do you have any additional comments on wastewater services?

_____
_____
_____
_____
_____

Q87 **STORMWATER SERVICES**

This section asks questions about water services characteristics such as number of customers, piped system, open channel, etc.

Q88 Does your city provide stormwater services?

- ❍ Yes (1)
- ❍ No (2)

Skip To: End of Block If Does your city provide stormwater services? = No

Q89 Please list the number of accounts for the following:

	Inside City Limits (1)	Outside City Limits (2)
Residential (1)		
Commercial (2)		
Other (3)		

Q90 Please provide the following facility and water source information:

- Total miles of piped system (1) _____
- Total miles of open channels, ditches, and swales (2) _____

Q91 What is the average Equivalent Dwelling Unit (EDU) for residential in square feet?

_____

Q92 Do you have any additional comments on stormwater services?

_____
_____
_____
_____
_____

Q93

Thank You for participating in this survey.

Do you have any additional comments on any topic in this survey?

_____
_____
_____
_____
_____

Appendix C: Map of Small Cities Regions